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AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph from page 8, line 18 to page 9, line 8 with the following amended paragraphs:

Further, the race portions 2c and 4a and the shoulder portion 2d are subjected to roller burnishing (deep rolling) after the finishing. According to the roller burnishing, while a mirror finish ball (mirror finished surface ball) made of ceramics held by, for example, hydraulic pressure is pressed to a surface of a working portion of the race portion 2c, or of the like, to bring into rolling contact therewith by strong pressure, the mirror finish ball is moved on the surface of the working portion. According to the roller burnishing, working conditions of an amount of burnishing, press force and the like are selected such that, for example, hardness at a depth of up to 0.4 at least 0.2mm from the surface of the working portion is work-hardened to be equal to or larger than Hv700 and a residual compressive stress at a depth of up to at least 0.3mm from the surface of the working portion becomes equal to or larger than 800 Mpa.

As clearly illustrated by Figure 1, an exemplary embodiment of the cross-shaft includes a round-shaped section (shoulder 2d) with a center of curvature (not shown) that is at an outer side of the cross shaft member.

Further, Figure 1 clearly illustrates that the round-shaped section (shoulder 2d) does not include a concave angled corner.

Please replace the paragraph at page 11, lines 8 to 22 with the following amended paragraphs:

Further, as shown in Fig. 3, at each race portion 2c, a residual compressive stress equal to or larger than 800MPa is generated at a depth of up to 0.3mm from the surface and work hardening is produced up to a depth about twice as much as that of the short-peened product.

Fig. 3 also illustrates that a residual compressive stress at a depth of approximately 0.1 mm from the roller burnished surface is larger than a residual compressive stress a depth of less than approximately 0.1 mm from the roller burnished surface, a residual compressive stress at a depth of approximately 0.2 mm from the roller burnished surface is larger than a residual compressive stress a depth of greater than approximately 0.2 mm from the roller burnished surface, and a residual compressive stress at a depth of approximately 0.01 mm

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from the roller burnished surface is less than a residual compressive stress at a depth of approximately 0.3 mm from the roller burnished surface.

By producing the large residual compressive stress at the race portion 2c in this way, inner portion originated flaking at the race portion 2c can effectively be restrained from being brought about and the fatigue strength against stresses generated at inside of the race portion 2c can be increased. That is, at the shoulder portion 2d subjected to roller burnishing, the fatigue strength against bending stress operated by two of the shafts 2b continuous to the shoulder portion 2d can be increased and the bending fatigue breaking (fracture) can effectively be restrained from being brought about.

Please replace the paragraph at page 14, lines 7 - 23 with the following amended paragraph:

Further, although according to the above-described explanation, an explanation has been given of a case of constituting the cross shaft member 2 and the bearing cup 4 by using bearing steel, the invention is not limited thereto but there may be constructed a constitution in which a cross shaft member, a bearing cup, or the like is constituted by carbon steel having a carbon content of, for example, 0.42 weight % or more, or a steel material hardened to a hardness of about HRC55 by subjecting the material steel to a heat treatment or a high-frequency quenching treatment and the race portion and the shoulder portion is subjected to roller burnishing. By using carbon steel for mechanical structure in this way, a cross shaft member having a fatigue strength substantially comparable to that of the conventional product comprising bearing steel and restraining material cost can easily be constituted and the cross joint can be fabricated at low cost.